

**RESAMPLER FOR A BIT PUMP AND METHOD OF RESAMPLING
A SIGNAL ASSOCIATED THEREWITH**

ABSTRACT OF THE DISCLOSURE

5

A resampler, method of resampling a signal and a bit pump and transceiver employing the same. In one embodiment, the resampler includes an interpolation stage, coupled to an input of the resampler, that receives a one-bit input signal representing at least a portion of a receive signal propagating along a receive path of the bit pump and generates a plurality of intermediate samples from at least two input samples associated with the one-bit input signal. The resampler also includes a selection stage, coupled to the interpolation stage, that selects one of the plurality of intermediate samples thereby providing an output sample that corresponds to a phase of an oscillator associated with the bit pump.

10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95